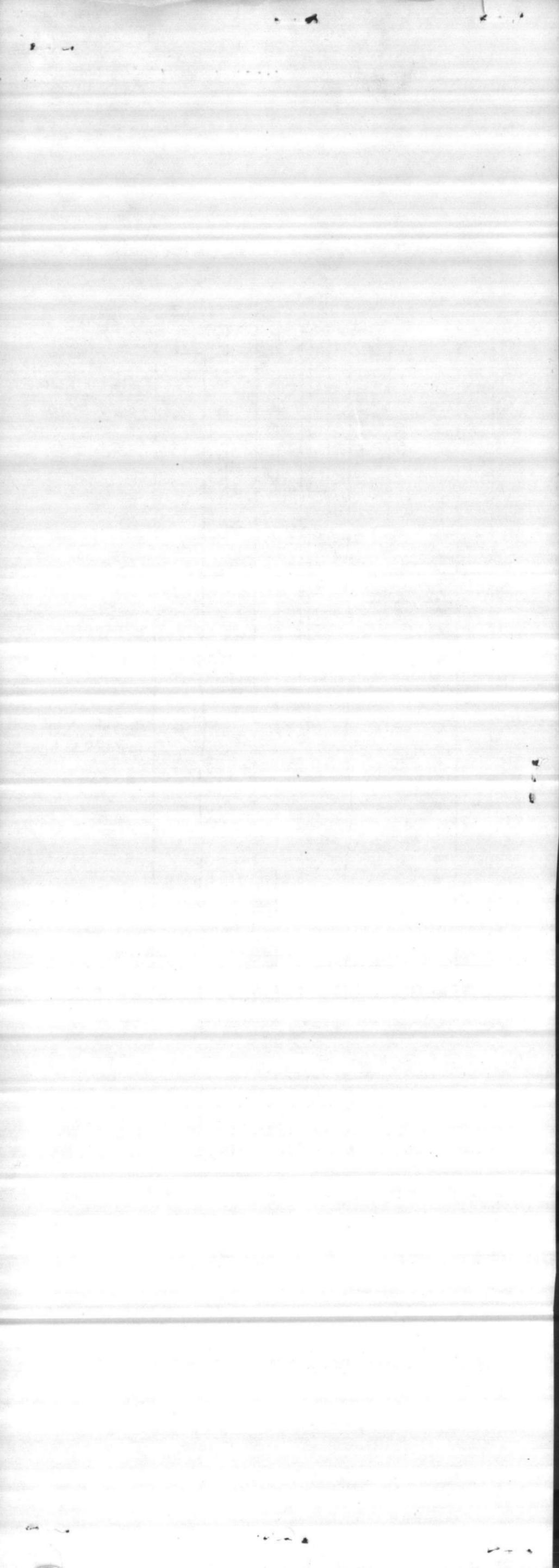


Armco Iron Screen Used In This Well

HOSPITAL WELL "E-1"



CHEMICAL ANALYSIS - WATER  
 MCBCL 11330/3 (REV 8-74)

MR PRICE

Date 31 Jan 78

USNH  
 well H-37

Parameter	HADNOT POINT	<del>MONTFORD POINT</del>	CAMP GEIGER	TARAWA TERRACE	ONSLOW BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
PH		6.9							
PHENOLTHALEIN ALKALINITY		0							
METHYL ORANGE ALKALINITY		80							
CARBONATES AS CaCO <sub>3</sub>		0							
BICARBONATES AS CaCO <sub>3</sub>		80							
CHLORIDES AS Cl		8							
HARDNESS AS CaCO <sub>3</sub>		90							
IRON AS Fe		0.75							
TOTAL PHOSPHATE									
ORTHO PHOSPHATE									
META PHOSPHATE									
FLUORIDE		0.07							
CHLORINE RESIDUAL		—							

REMARKS:

TURBIDITY

38

Coli-ferm - NEGATIVE

NOTE: All results reported in parts per million unless otherwise noted except for pH, temperature, and specific conductance. One liter of potable water is assumed to weigh one kilogram.

LABORATORY ANALYSIS BY:

FAROS + BROWN

DATE OF ANALYSIS:

1 FEB 78



2 August 1942

**Wells:** Permanent Water Supply, Hospital Area  
By Layne Atlantic Company  
Report on Well E-1, this area

**Location:** Seventy feet North of N.E. corner of Medical Warehouse in line with East side.

**Drilling Equipment:** Rotary Rig and Rotary Bits

**Status:** 23" diameter hole reamed and cased with 18" I. D. casing to a depth of 24 ft. Annular space around this was filled with cement grout. A 17" hole was then drilled to a depth of 110 ft.

**Log of Formation:**

0 to 10'	Tight sand with little clay
10' to 32'	Sandy clay
32' to 52'	Very fine sand
52' to 92'	Fine sand and shells
92' to 94'	Fine sand, shells and blue clay
94' to 110'	Fine sand and shells
110' to	Very hard rock

**Remarks:** Drilled one well about 2000' from this, near laundry and could not get any water from it. Due to the very fine sand, it was necessary to construct a gravel wall well.

**Gravel Wall Construction:** An 8" steel pipe with sections of 8" armco iron iron screen was placed in the well to a depth of 102'. The annular space around this was filled with a special 1/4" washed gravel.

1. The first part of the report...

2. The second part of the report...

3. The third part of the report...

4. The fourth part of the report...

5. The fifth part of the report...

6. The sixth part of the report...

7. The seventh part of the report...

8. The eighth part of the report...

Wells: Permanent Water Supply, Hospital Area

Report on Well-1, this area - Continued

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Log of Screen	0 to 52'	8" pipe
Setting:	52' to 82'	8" iron screen
	82' to 92'	8" pipe
	92' to 102'	8" screen

A total of 40' of screen was used.

Air Line: 60' of 1/4" pipe was placed in the well for air line.

Static level: 8'4" below surface

Pumping: Well was pumped for several hours to clear off sand and clay.  
Well pumps 100 G.P.M. with a 51' drawdown from static level. This is approximately 1.96 gallons per foot of drawdown.

N. H. Kellam  
Asst. Chem. Engineer



Well at Mock up.

El. 25.00

0  
5  
10  
15  
20  
25  
30  
35  
40



Well Completed at depth 40'-0"  
No screen or gravel used  
Well pumps 100 G.P.M. with 30'-0"  
17' down below surface  
30'-0" 18" casing set and cemented  
1/4" top of rock static 8'-10"  
below surface

### LOG of formation

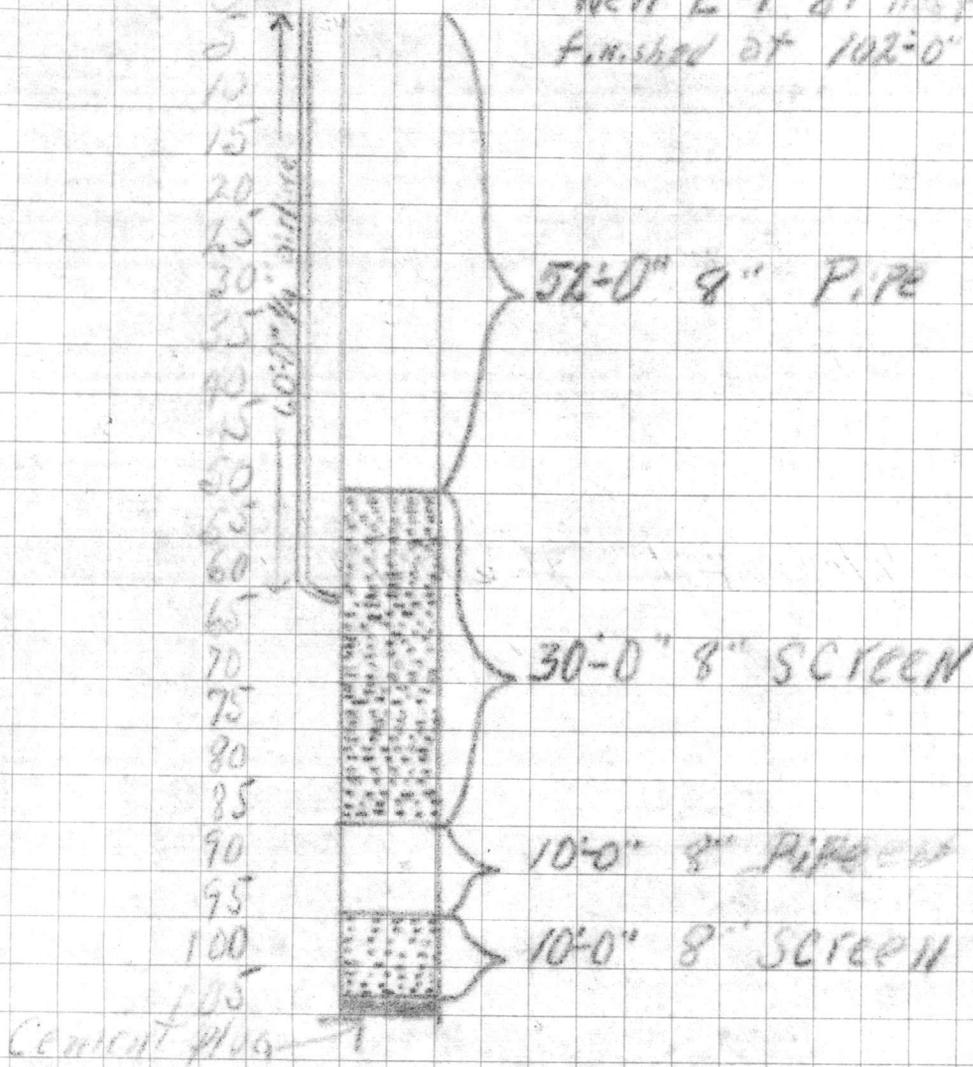
0 to 18'-0"	hard brown sand
18 to 28'	fine white sand
28 to 40'	hard shell rock with sand pockets
	sand stone

C.C. Mr. Monroe  
Mr. Kellam

Mock up  
Kellan

Well E-1 at hospital  
finished at 102'-0" deep

6'-0" 1 1/2" Cement Plug  
11'-0" 8" Pipe  
12'-0" 8" Pipe  
13'-0" 8" Pipe  
14'-0" 8" Pipe  
15'-0" 8" Pipe  
16'-0" 8" Pipe  
17'-0" 8" Pipe  
18'-0" 8" Pipe  
19'-0" 8" Pipe  
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93'-0" 8" Pipe  
94'-0" 8" Pipe  
95'-0" 8" Pipe  
96'-0" 8" Pipe  
97'-0" 8" Pipe  
98'-0" 8" Pipe  
99'-0" 8" Pipe  
100'-0" 8" Pipe  
101'-0" 8" Pipe  
102'-0" 8" Pipe



Drilled down screen  
in this well

LOG of formation

- 0' To 10' Tight sand with little clay
- 10' To 32' Sandy clay
- 32' To 26' fine sand (almost muck)
- 54' To 94' fine sand and shells
- 12' To 94' fine sand shells and blue clay
- 12' To 110' fine sand and shell
- 110' hard rock like cement impervious to water

C. M. MURSE  
M. R. HARRIS

Well E.I. Hospital  
Mr. Kellam

WATER ANALYSIS

By N. H. Kellan

Date 7/14/42

Sample from Well E-1- Hospital

Total Solids 190 PPM      Dissolved Solids 160 PPM

Suspended Solids 30 PPM      Volatile Solids \_\_\_\_\_ PPM

Phenol. Alk. as CaCO<sub>3</sub> 0 PPM      Silica as SiO<sub>2</sub> 30 PPM

Total Alk. " " 110 "      Ferrous Iron as Fe 0 "

Carbonates " " 0 "      Total Iron as Fe 0.4 "

Bicarbonates " " 110 "      Aluminum as Al. 1.7 "

Chlorides as Cl. 10 "      Calcium as Ca. 46.0 "

Sulphates as SO<sub>4</sub> 18 "      Magnesium as Mg. 4.3 "

Nitrites as NO<sub>2</sub> trace "      Sodium as Na. 4.6 "

Carbon Dioxide as CO<sub>2</sub> 6 "

pH 7.4      Soap Hardness as CaCO<sub>3</sub> 140 PPM

Odor slight      Turbidity 5

REMARKS \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

WATER ANALYSIS

BY \_\_\_\_\_

Date \_\_\_\_\_

Sample from \_\_\_\_\_

Total Solids \_\_\_\_\_ PPM Dissolved Solids \_\_\_\_\_ PPM

Suspended Solids \_\_\_\_\_ PPM Volatile Solids \_\_\_\_\_ PPM

Phenol, Alk. as Calcog \_\_\_\_\_ PPM Nitric as Nitro \_\_\_\_\_ PPM

Total Alk. " " \_\_\_\_\_ " Ferrrous Iron as Fe \_\_\_\_\_ "

Carbonates " " \_\_\_\_\_ " Total Iron as Fe \_\_\_\_\_ "

Bicarbonates " " \_\_\_\_\_ " Aluminum as Al \_\_\_\_\_ "

Chlorides as Cl \_\_\_\_\_ " Calcium as Ca \_\_\_\_\_ "

Sulphates as SO<sub>4</sub> \_\_\_\_\_ " Magnesium as Mg \_\_\_\_\_ "

Nitrates as NO<sub>3</sub> \_\_\_\_\_ " Sodium as Na \_\_\_\_\_ "

Carbon Dioxide as CO<sub>2</sub> \_\_\_\_\_

PH Soap Hardness as CaCO<sub>3</sub> \_\_\_\_\_

Color Turbidity \_\_\_\_\_

REMARKS

WATER ANALYSIS

By N. H. Kellan

Date 7/10/42

Sample from test Well No. 2 at Hospital  
64' Deep

Total Solids \_\_\_\_\_ PPM      Dissolved Solids \_\_\_\_\_ PPM  
Suspended Solids \_\_\_\_\_ PPM      Volatile Solids \_\_\_\_\_ PPM

Phenol. Alk. as CaCO<sub>3</sub> 0 PPM      Silica as SiO<sub>2</sub> \_\_\_\_\_ PPM  
Total Alk.    "    " 100 "      Ferrous Iron as Fe \_\_\_\_\_ "  
Carbonates    "    " 0 "      Total Iron as Fe \_\_\_\_\_ "  
Bicarbonates "    " 100 "      Aluminum as Al. \_\_\_\_\_ "  
Chlorides as Cl. 11 "      Calcium as Ca. \_\_\_\_\_ "  
Sulphates as SO<sub>4</sub> \_\_\_\_\_ "      Magnesium as Mg. \_\_\_\_\_ "  
Nitrites as NO<sub>2</sub> \_\_\_\_\_ "      Sodium as Na. \_\_\_\_\_ "  
Carbon Dioxide as CO<sub>2</sub> \_\_\_\_\_ "

pH 7.4 Soap Hardness as CaCO<sub>3</sub> 140 PPM

Odor very slight      Turbidity 5

REMARKS \_\_\_\_\_  
Permanent Well at this site  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WATER ANALYSIS

By \_\_\_\_\_

Date \_\_\_\_\_

Sample from \_\_\_\_\_

_____ PPM	_____ Dissolved Solids	_____ PPM	_____ Total Solids
_____ PPM	_____ Suspended Solids	_____ PPM	_____ Suspended Solids

_____ PPM	_____ Silica as SiO <sub>2</sub>	_____ PPM	_____ Total Al <sub>2</sub> O <sub>3</sub>
"	_____ Ferric Iron as Fe <sub>2</sub> O <sub>3</sub>	"	_____ Carbonates
"	_____ Total Iron as Fe	"	_____ Bicarbonates
"	_____ Aluminum as Al <sub>2</sub> O <sub>3</sub>	"	_____ Chlorides as Cl <sub>2</sub>
"	_____ Calcium as Ca	"	_____ Sulphates as SO <sub>4</sub>
"	_____ Magnesium as Mg	"	_____ Nitrate as NO <sub>3</sub>
"	_____ Sodium as Na	"	_____ Carbon Dioxide as CO <sub>2</sub>

\_\_\_\_\_ Soap Hardness as CaCO<sub>3</sub>

\_\_\_\_\_ Turbidity

REMARKS

WATER ANALYSIS

By N. H. Kellam

Date 7/9/42

Sample from Test Well at Hospital  
95' Deep

Total Solids \_\_\_\_\_ PPM      Dissolved Solids \_\_\_\_\_ PPM

Suspended Solids \_\_\_\_\_ PPM      Volatile Solids \_\_\_\_\_ PPM

Phenol. Alk. as CaCO<sub>3</sub> 0 PPM      Silica as SiO<sub>2</sub> \_\_\_\_\_ PPM

Total Alk. " " 140 "      Ferrous Iron as Fe \_\_\_\_\_ "

Carbonates " " 0 "      Total Iron as Fe \_\_\_\_\_ "

Bicarbonates " " 140 "      Aluminum as Al. \_\_\_\_\_ "

Chlorides as Cl. 17 "      Calcium as Ca. \_\_\_\_\_ "

Sulphates as SO<sub>4</sub> \_\_\_\_\_ "      Magnesium as Mg. \_\_\_\_\_ "

Nitrites as NO<sub>2</sub> Trace "      Sodium as Na. \_\_\_\_\_ "

Carbon Dioxide as CO<sub>2</sub> \_\_\_\_\_ "

pH 7.6      Soap Hardness as CaCO<sub>3</sub> \_\_\_\_\_ PPM

Odor Slight      Turbidity Very High

REMARKS

This site discontinued

WATER ANALYSIS

By \_\_\_\_\_

Date \_\_\_\_\_

Sample from \_\_\_\_\_

Total Solids \_\_\_\_\_ PPM  
 Dissolved Solids \_\_\_\_\_ PPM  
 Suspended Solids \_\_\_\_\_ PPM  
 Volatile Solids \_\_\_\_\_ PPM

Total Alk. as CaCO<sub>3</sub> \_\_\_\_\_ PPM  
 Total Alk. " " " " \_\_\_\_\_  
 Carbonates " " " " \_\_\_\_\_  
 Bicarbonates " " " " \_\_\_\_\_  
 Chlorides as Cl. " " " " \_\_\_\_\_  
 Sulfates as SO<sub>4</sub> " " " " \_\_\_\_\_  
 Nitrates as NO<sub>3</sub> " " " " \_\_\_\_\_  
 Total Dissolved Solids \_\_\_\_\_

Hardness as CaCO<sub>3</sub> \_\_\_\_\_ PPM

Color \_\_\_\_\_ Turbidity \_\_\_\_\_

REMARKS